

# 12<sup>th</sup> NCI CCR Fellows and Young Investigators Colloquium

## Program

*Monday, March 26, 2012*

---

8:00-8:30 a.m. ***Registration and Poster Set-up***

8:30-8:45 a.m. ***Plenary Session (Main Auditorium)***

***Opening Remarks and CCR-FYI Overview***

**Kristin Fabre, Ph.D.**, Chair, CCR-FYI Steering Committee

8:45-9:00 a.m. ***Opening Remarks from the CCR Office of Training and Education***

**Jonathan Wiest, Ph.D.**, Associate Director, Office of Training and Education,  
Center for Cancer Research, NCI

9:00-9:30 a.m. ***CCR Office of the Director Address***

**Robert Wiltrout, Ph.D.**, Director, Center for Cancer Research, NCI

9:30-10:30 a.m. ***Keynote Speaker I: "Design and Development of Therapeutic Cancer Vaccines" (Main Auditorium)***

**Jeffrey Schlom, Ph.D.**, NCI CCR Laboratory of Tumor Immunology and  
Biology, and Head of the Immunotherapeutics Group, NCI

*Moderators: Alyson Freeman, Ph.D. and Balamurugan Kuppusamy, Ph.D.*

10:45-12:00 p.m. ***Concurrent Oral Presentations I***

***1. Immunology I (Room E1/E2)***

10:45 **Balamurugan Kuppusamy**, Laboratory of Cell and  
Developmental Signaling

*FBXW7 $\alpha$  attenuates inflammatory signaling by suppressing  
expression of Cebpd and its target gene Tlr4*

- 11:00 **Mingqian Feng**, Laboratory of Molecular Biology  
*HN3: a human single-domain monoclonal antibody binds cell surface-associated glypican-3 and inhibits hepatocellular carcinoma cell proliferation*
- 11:15 **Marco Cardone**, Laboratory of Experimental Immunology  
*Interleukin (IL)-1 $\beta$  controls the Dectin-1 mediated programming of human dendritic cells via I $\kappa$ B-zeta*
- 11:30 **Jaba Gamrekelashvili**, Medical Oncology Branch  
*Tumor cells contain veto factors limiting immunogenicity of sterile necrosis and controlling CD8 $^{+}$  T cell activation*
- 11:45 **Jinyao Li**, Vaccine Branch  
*Co-immunization with HIV env DNA and Protein Elicit Both Strong Cellular and Humoral Immune Responses*

Moderators: Katie Stagliano, M.S. and Miranda Hanson, Ph.D.

## 2. **Molecular and Cell Biology, Virology, and Bioinformatics I** *(Balcony A)*

- 10:45 **Alexander Gibbons**, Laboratory of Cancer Biology and Genetics  
*Tempol as a potential protective agent of nucleoside reverse transcriptase inhibitor (NRTI)-induced mitochondrial toxicity*
- 11:00 **Nicole Naiman**, HIV and AIDS Malignancy Branch  
*Oxidative stress upregulates the latency-associated nuclear antigen protein of Kaposi Sarcoma-Associated Herpesvirus in chronically infected cells*
- 11:15 **Viraj Kulkarni**, Vaccine Branch  
*Altering the Immunodominance Hierarchy of p55gag by DNA Vaccine Expressing Conserved Regions*
- 11:30 **Andrea Fischione**, Medical Oncology Branch  
*Cell cycle-dependent phosphorylation regulates BAG3 binding to Hsp70*
- 11:45 **Rashmi Jalah**, Vaccine Branch  
*SIVmac239 DNA and Virus Particle Vaccination Confers Protection From Infection and Disease Progression Upon Challenge With Heterologous SIVsmE660*

Moderators: Brajendra Tripathi, Ph.D. and Poorva Dharkar, Ph.D.

### **3. Chemistry, Pharmacology, and Structural Biology (Balcony B)**

- 10:45 **Yuhong Chen**, Cancer and Inflammation Program  
*Fully synthetic virus-like nanoparticles targeting prostate cancer cells*
- 11:00 **Emily Whitson**, Molecular Targets Laboratory  
*Synergistic TRAIL sensitizers from *Barleria alluaudii* and *Diospyros maritima**
- 11:15 **Suneet Shukla**, Laboratory of Cell Biology  
*3DQSAR studies of BCR-ABL kinase inhibitor, Tasigna (nilotinib) and its derivatives for identification of pharmacophore essential for interaction with ABC drug transporters and target kinases*
- 11:30 **Mathieu Metifiot**, Laboratory of Molecular Pharmacology  
*Understanding HIV-1 Integrase and strand transfer inhibitors to overcome clinical resistance*
- 11:45 **Yeong Sang Kim**, Chemical Biology Laboratory  
*Development of a high-throughput SUMOylation assay using fluorescent peptide probes and identification of SUMOylation inhibitors*

Moderators: Adeola Makinde, Ph.D. and Fanching Lin, Ph.D.

### **4. Genetics, Genomics, and Proteomics (Room F1/F2)**

- 10:45 **Sichuan Xi**, Surgery Branch  
*miR487b is a Tumor Suppressor Silenced by Epigenetic Mechanisms during Tobacco-Induced Pulmonary Carcinogenesis*
- 11:00 **McAnthony Tarway**, Laboratory of Translational Genomics  
*Risk alleles of four prostate cancer associated variants within the 8q24.2 region show increased interaction with androgen receptor*
- 11:15 **Indu Kohaar**, Laboratory of Translational Genomics  
*Functional exploration of CCNE1 splicing forms and link to bladder cancer*
- 11:30 **Nilabja Sikdar**, Laboratory of Translational Genomics

*Identification and Functional Characterization of a Novel Splicing Form of the TPCN2 Gene on 11q13.3 Within a Region Associated with Prostate Cancer Risk*

11:45 **Hui Yang**, Gene Regulation and Chromosome Biology Laboratory  
*Identifying and Cloning the Hard Stuff from MCF7 breast cancer Cell line: DNA Palindromes*

*Moderators:* Ishminder Mann, Ph.D. and Jane (Xiao Hui) Tan, Ph.D.

**5. Cancer Models, Metastasis, Microbiology, and Biophysics**  
(Balcony C)

10:45 **Sarah Beachy**, Genetics Branch  
*Enforced Expression of Lin28b Results in Peripheral T Cell Lymphoma In Vivo*

11:00 **Natascia Marino**, Laboratory of Molecular Pharmacology  
*Biochemical and functional interaction of two metastasis suppressors, Nm23-H1 and Gelsolin, in breast carcinoma cells*

11:15 **Qun Jiang**, Laboratory of Experimental Immunology  
*IKK $\alpha$  links inflammation and tumorigenesis in lung squamous cell carcinoma*

11:30 **Suhwan Chang**, Mouse Cancer Genetics Program  
*E3 ubiquitin ligase activity of human BRCA1 is necessary for its tumor suppression function*

11:45 **Akiko Chiba**, Laboratory of Cell and Developmental Signaling  
*Functional Characterization of Rab31 Gene in Pancreatic Cancer Cell Tumorigenesis*

*Moderators:* Maria Cristina Rangel, Ph.D., and Bethanie Morrison, Ph.D.

12:00-1:30 p.m. **Poster Session I**

12:00-12:45 p.m. *Odd-numbered Posters – presenter must be present*

12:45-1:30 p.m. *Even-numbered Posters – presenter must be present*

- Immunology I
- Molecular and Cell Biology, Virology, and Bioinformatics I
- Chemistry, Pharmacology, and Structural Biology
- Genetics, Genomics, and Proteomics

- Cancer Models, Metastasis, Microbiology, and Biophysics

1:30-2:30 p.m. ***Special Highlight Presentation: “Cancer Survivorship” (Main Auditorium)***

**Joanna Rudnick**, Owner/Producer at Joanna Rudnick Productions LLC  
**Moderators:** Nesrin Rechache, Ph.D. and Maria Cristina Rangel, Ph.D.

2:30-3:30 p.m. ***Keynote Speaker II: “Functional Annotation of the Cancer Genome via RNAi” (Main Auditorium)***

**Natasha Kaplan, Ph.D.**, Head of Gene Silencing Section, Genetics Branch, CCR, NCI

**Moderators:** John Simmons, B.S. and Alyson Freeman, Ph.D.

3:45-5:15 p.m. ***Concurrent Workshops I***

**1. Preclinical Research and Development: From Discovery to Therapy (Main Auditorium)**

**Susan E. Old, Ph.D.**, Senior Advisor and Acting Scientific Deputy Director of the NIH Center for Translational Therapeutics (NCTT), NIH.

**Alice Chen, MD, FACP**, Medical Officer, Investigational Drug Branch, CTEP, DCTD, NCI.

**Susan E Bates, MD**, Senior Investigator, Medical Oncology Branch and Affiliates, Head, Molecular Therapeutics Section, NCI

**Paul G. Kluetz, M.D.**, Medical Officer, Division of Drug Oncology Products (DDOP), OODP, OND, CDER, FDA.

**Moderators:** John Simmons, B.S. and Anne Noonan, M.D.

**2. Careers in Science Writing: Trading in the Pipette for the Pen (F1/F2)**

**Sean Sanders, Ph.D.**, Editor for Custom Publishing and Program Director for Outreach, Science/AAAS

**Carol Torgan, Ph.D.**, Expert reviewer for HealthNewsReview.org and consultant

**Susan Kralian, Ph.D.**, Founder Oncology Medical Writing Services, Inc.

**Jennifer Crawford, Ph.D.**, Science writing contractor, NCI Office of Communications and Education

**Allison Bierly, Ph.D.**, Technical Writer, Qiagen

**Moderators:** Jeffrey Zhao, Ph.D. and Nesrin Rechache, Ph.D.

### ***3. Making Yourself Marketable (E1/E2)***

**Lori M. Conlan, Ph.D.**, Director of Postdoctoral Services, Office of Intramural Training and Education, NIH

**Samantha Sutton, Ph.D.**, Vice President and Director of Courses and Seminar, Senior Coach, Handel Group

**Randall Ribaud, Ph.D.**, President, CEO, Human Workflows, LLC; Co-founder, SciPhD.com

**Marc Kuchner, Ph.D.**, Research Astrophysicist, NASA/Goddard Space Flight Center

*Moderators:* Ravikiran Yedidi, Ph.D. and Janani Varadarajan, Ph.D.

5:15 p.m. ***ADJOURN***

5:45 p.m. ***Happy Hour (Blackfinn Restaurant, Fairmont Ave., Bethesda, MD)***

***Tuesday, March 27, 2012***

---

8:00-8:30 a.m. ***Registration and Poster Set-up***

8:30-9:30 a.m. ***Keynote Speaker III: “Stem Cells in Lung Regeneration and Repair” (Main Auditorium)***

**Brigid Hogan, Ph.D., FRS**, Professor and Chair, Department of Cell Biology, Duke University

*Moderators:* Kristin Fabre, Ph.D. and Katie Stagliano, Ph.D.

9:45-11:15 a.m. ***Concurrent Workshops II***

#### ***1. Careers Outside Academia – Industry, Business and Government (Balcony A)***

**Marguerite Camp Clarkson, Ph.D.**, Senior Associate,

PricewaterhouseCoopers LLP, Washington Federal Practice

**Rebecca Dunfee, Ph.D.**, Senior Consultant, Booz Allen Hamilton

**Ramkumar Mandalam, Ph.D.**, President and CEO, Cellerant Therapeutics Inc.

**Kurt Marek, Ph.D.**, Program Director, National Heart, Lung, and Blood Institute, NIH

**Brock A. Peters, Ph.D.**, Associate Director of Research, Complete Genomics Inc.

*Moderators:* Barbara Rath, Ph.D. and Ishminder Mann, Ph.D.

## **2. Careers in Academia and Grants management (E1/E2)**

**Nancy C. Lohrey, M.S., M.T.-ASCP**, Program Director, Grant Awards,  
Cancer Training Branch, NCI-CCT/NIH

**Margarita (Magui) Cardona, M.S., C.R.A.**, Director of Sponsored  
Research, University of Baltimore, MD

**Ram Savan, Ph.D.**, Assistant Professor, Department of Immunology,  
University of Washington, Seattle, WA

**Ancha Baranova, Ph.D.**, Associate Professor, Molecular and  
Microbiology Department, George Mason University, Manassas, VA

**Craig Laufer, Ph.D.**, Professor of Biology, Hodson Science &  
Technology Center, Hood College, Frederick, MD

*Moderators:* Poorva Dharkar, Ph.D. and Jacqueline Salotti, Ph.D.

## **3. Communicating Science: Getting the Message Out (Balcony C)**

**Evonne Kaplan-Liss MD, MPH, FAAP**, Director, Advanced Certificate in  
Health Communications, Research Assistant Professor of Preventive  
Medicine, Graduate Program in Public Health, School of Journalism,  
State University of New York at Stony Brook

*Moderators:* Maria Cristina Rangel, Ph.D. and Janani Varadarajan, Ph.D.

### 11:30-12:45 p.m. **Concurrent Oral Presentations II**

#### **1. Immunology II (Room E1/E2)**

11:30 **Andrew Stewart**, Cancer Inflammation Program  
*IL-10 FROM TUMOR T REGULATORY CELLS IS INDUCED BY TYPE I  
INTERFERON AND LIMITS THE LOCAL TH-17 RESPONSE*

11:45 **Dror Luger**, Laboratory of Cancer Biology and Genetics  
*Tumor-Induced CD79 Expressing Myeloid Cells Are Associated  
With The Metastatic Process In Mouse Models Of Breast Cancer*

12:00 **Anna Nam**, Experimental Immunology Branch  
*Transgenic interleukin-6 enhances peripheral T cell survival and  
homeostasis*

12:15 **Nirali Shah**, Pediatric Oncology Branch  
*A Pilot Trial of Wilms tumor 1 (WT1) Peptide-Loaded Allogeneic  
Dendritic Cell (DC) Vaccination and Donor Lymphocyte Infusions  
(DLI) for WT1-Expressing Hematologic Malignancies Relapsing  
after Allogeneic Hematopoietic Stem Cell Transplantation  
(alloHSCT)*

12:30 **Paul Su**, Pediatric Oncology Branch  
*Immunosuppression of the Host Immune System in Acute Lymphoblastic Leukemia: an insight into the role of PD-1*

*Moderators:* Muthukumar Balasubramaniam, Ph.D. and Sagar Kudchodkar, Ph.D.

## **2. Molecular and Cell Biology, Virology, and Bioinformatics II** (Balcony B)

11:30 **Marco Mineo**, Medical Oncology Branch  
*Chronic myeloid leukemia (CML) exosomes promote angiogenesis in a Src-dependent fashion in vitro and in vivo*

11:45 **Philip Tedbury**, HIV Drug Resistance Program  
*ADP-Ribosylation Factor 1 in HIV-1 Assembly and Release*

12:00 **Bing Yu**, Molecular Oncology Branch  
*Protein SUMOylation is synthetic lethal to oncogenic KRAS in colorectal cancer cells*

12:15 **Ina O'Carroll**, HIV Drug Resistance Program  
*Functional Redundancy in HIV-1 Assembly*

12:30 **Vijay Walia**, Laboratory of Cell and Developmental Signaling  
*Lysophosphatidic acid signaling regulates primary cilia assembly*

*Moderators:* Balamurugan Kuppusamy, Ph.D. and Ravindra Veeranna, Ph.D.

## **3. Translational, Clinical, and Epidemiology Research** (Balcony A)

11:30 **Daniel Lee**, Pediatric Oncology Branch  
*Surprising Eradication of Pediatric ALL by CD4+ T cells with a CD19-Specific Chimeric Antigen Receptor*

11:45 **Holger Pflicke**, Surgery Branch  
*Dual PI3K/mTOR inhibition induces cell death in a defined subset of pancreatic cancer cell lines*



- 12:00 **Prashant Tembhare**, Laboratory of Pathology  
*CD81: A Novel, Specific and Highly Sensitive Marker in Flow Cytometric Diagnosis of Plasma Cell Dyscrasia*
- 12:15 **David Soto Pantoja**, Laboratory of Pathology  
*Deficiency of CD47 in the tumor microenvironment enhances tumor responses to ionizing radiation, preserves immunosurveillance, and protects normal tissue through an increase in autophagy*
- 12:30 **Yi-Ping Fu**, Laboratory of Translational Genomics  
*Common genetic variants in the PSCA gene influence gene expression and bladder cancer risk*

*Moderators:* Nesrin Rechache, Ph.D. and John Simmons, B.S.

#### **4. Signal Transduction, Transcription, and Chromatin (Room F1/F2)**

- 11:30 **Stephanie Morris**, Laboratory of Receptor Biology and Gene Expression  
*Multiple Chromatin Remodeling Systems Contribute to Dynamic Transitions in Chromatin Structure*
- 11:45 **Elisabetta Leo**, Laboratory of Molecular Pharmacology  
*Analysis of DNA Replication in Cancer Cells upon Knockdown of Licensing and Initiation Factors*
- 12:00 **Su-Ryun Kim**, Laboratory of Cell and Developmental Signaling  
*C/EBP $\delta$  promotes nuclear localization of p21CIP1 and cytotoxicity of tamoxifen in ER(+) breast tumor cells*
- 12:15 **Aparna Kotekar**, Experimental Immunology Branch  
*Bidirectional Transcription of the Upstream Regulatory Region may serve a Regulatory Role in MHC Class I Transcription*
- 12:30 **Ya Zhang**, Laboratory of Molecular Pharmacology  
*A mammalian replicator binding protein essential for sequence-specific initiation of DNA replication*

*Moderators:* Jeffrey Zhao, Ph.D. and Jacqueline Salotti, Ph.D.

## **5. Cancer Prevention, Carcinogenesis, and Cancer Stem Cells** (Balcony C)

- 11:30 **Wei Liu**, Basic Research Laboratory  
*The reprogramming of proline and glutamine metabolism contributes to the proliferative and metabolic responses regulated by c-MYC*
- 11:45 **Kian-Huat Lim**, Medical Oncology Branch  
*Oncogenic TLR-MyD88 Signaling In Activated B-Cell-Like Diffuse Large B-Cell Lymphoma: Mechanism and Potential Therapeutic Strategies*
- 12:00 **Zhewei Tang**, Laboratory of Molecular Biology  
*A single-domain human antibody elicits potent antitumor activity by targeting an epitope in mesothelin close to the cancer cell surface*
- 12:15 **Lei Sun**, Laboratory of Cancer Prevention  
*Epigenetic Regulation of CpG Promoters by the NF-  $\kappa$ B Signaling Pathway in Pancreatic Cancer Stem Cells*
- 12:30 **Cody Schlaff**, Radiation Oncology Branch  
*Epigenetic modulation of glioma stem-like cells promotes decreased expression of CD133 and induces differentiation*

*Moderators:* Barbara Rath, Ph.D. and Geraldine O'Connor, Ph.D.

12:00-5:00 p.m. **Career Fair**

12:45-2:15 p.m. **Poster Session II**

*12:45-1:30 p.m. Odd-numbered Posters – presenter must be present*

*1:30-2:15 p.m. Even-numbered Posters – presenter must be present*

- Immunology II
- Molecular and Cell Biology, Virology, and Bioinformatics II
- Translational, Clinical, and Epidemiology Research
- Signal Transduction, Transcription, and Chromatin
- Cancer Prevention, Carcinogenesis, and Cancer Stem Cells
- Core Services

- 2:15-3:45 p.m. ***Navigating Work Relationships: Recognizing Conflict Pitfalls and Opportunities (Main Auditorium)***  
**Howard Gadlin, Ph.D.**, NIH Office of the Ombudsman, Center for Cooperative Resolution, NIH  
**Linda Myers, J.D.**, Associate Ombudsman, NIH Office of the Ombudsman, NIH.  
*Moderators:* Kristin Fabre, Ph.D. and Majda Haznadar, Ph.D.
- 3:45-4:45 p.m. ***Postdoctoral Keynote Speaker: "Tumor Heterogeneity and Personalized Therapy in Liver Cancer (Main Auditorium)***  
**Junfang Ji, M.D., Ph.D.**, Research Fellow, Laboratory of Human Carcinogenesis, NCI  
*Moderators:* Brid Ryan, Ph.D. and Jeffrey Zhao, Ph.D.
- 4:45-5:00 p.m. ***TRAVEL AWARDS (Main Auditorium)***
- 5:00-5:10 p.m. ***Closing Address (Main Auditorium)***  
**Francis S. Collins, M.D., Ph.D.** Director, NIH
- 5:15 p.m. ***ADJOURN***
- 5:45 p.m. ***Happy Hour (Blackfinn Restaurant, Fairmont Ave., Bethesda, MD)***